

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION**

LOYALTY CONVERSION SYSTEMS
CORPORATION,

Plaintiff,

v.

Case No. 2:13-CV-655
(LEAD CASE)

AMERICAN AIRLINES, INC., *et al.*,

Defendants.

**PLAINTIFF LOYALTY CONVERSION SYSTEMS CORPORATION'S
RESPONSE TO DEFENDANTS' MOTION FOR JUDGMENT ON THE PLEADINGS**

TABLE OF CONTENTS

I. RESPONSE TO DEFENDANTS’ STATEMENT OF THE ISSUE TO BE
DECIDED BY THE COURT1

II. SUMMARY OF THE ARGUMENT 2

III. APPLICABLE AUTHORITY 2

IV. ARGUMENT 4

 A. The Programmed Hardware-Implemented Method Claims Are Directed to
 Patentable Subject Matter 5

 1. The Programmed Hardware-Implemented Method Claims Are Not
 Directed to the “Abstract Concept of Currency Conversion”6

 2. Claims 1-3 and 5-7 of the ‘550 Patent Require Contractual
 Agreements between Parties14

 3. The Programmed Hardware-Implemented Method Claims are
 Directed to a Concrete Transaction, Not an Abstract Idea15

 B. The Computer Medium Claims Are Directed to Patentable Subject Matter 19

V. CONCLUSION 21

TABLE OF AUTHORITIES

CASES

<i>Accenture Global Servs., GmbH v. Guidewire Software, Inc.</i> , 728 F.3d 1336 (Fed. Cir. 2013)	8, 9
<i>Bancorp Servs. v. Sun Life Assurance Co. of Can.</i> , 687 F.3d 1266 (Fed. Cir. 2012)	16
<i>Bilski v. Kappos</i> , 130 S. Ct. 3218 (2010)	1, 3, 5, 14, 17, 20
<i>Clear with Computers</i> , 2014 WL923280	2
<i>CLS Bank Int’l v. Alice Corp. Pty. Ltd.</i> , 717 F.3d 1269 (Fed. Cir. 2013)	3, 4, 5, 6, 12, 16, 17
<i>Compare In re Lowry</i> , 32 F.3d 1579, 1583-84 (Fed. Cir. 1994)	18, 20
<i>Diamond v. Chakrabarty</i> , 447 U.S. 303 (1980)	3
<i>Diehr</i> , 450 U.S. at 188	12, 13
<i>Erickson v. Pardus</i> , 551 U.S. 89, 93-94 (2007)	2
<i>Ex Parte Steve Grove and Larry Cornett</i> , 2014 WL 553847 (PTAB January 28, 2014)	19
<i>Gottschalk v. Benson</i> , 409 U.S. 63, 67 (1972)	5
<i>Great Plains Trust Co. v. Morgan Stanley Dean Witter & Co.</i> , 313 F.3d 305 (5th Cir. 2002)	2
<i>Honewell Inc. V. Sperry Rand Corp.</i> , No. 4-67-cv-138, 1973 WL 903 (D. Minn. Oct. 19, 1973)	6
<i>In re Beauregard</i> , 53 F.3d 1583, 1584 (Fed. Cir. 1995)	19
<i>In re Warmerdam</i> , 33 F.3d 1354 (Fed. Cir. 1994)	20
<i>Mayo Collaborative Servs. v. Prometheus Labs., Inc.</i> , 132 S. Ct. 1289 (2012)	3
<i>Microsoft Corp. v. i4i Limited Partnership</i> , 131 S. Ct. 2238 (2011)	2
<i>TQP Development, LLC v. Intuit Inc.</i> , 2014 WL 651935 (E.D. Tex. Feb. 19, 2014)	5, 9
<i>Ultramercial, Inc. v. Hulu, LLC</i> , 722 F.3d 1335 (Fed. Cir. 2013)	1, 8, 10

STATUTES

35 U.S.C. § 101	1, 2, 3, 4, 6, 15, 19, 20, 21
-----------------------	-------------------------------

OTHER AUTHORITIES

<i>Apple Inc. v. Sightsound Tech., LLC</i> , CBM2013-00019, slip opinion (P.T.A.B. 2013)	13, 14
--	--------

Plaintiff Loyalty Conversion Systems Corporation (“Loyalty Conversion” or “Plaintiff”) files this response to the Rule 12(c) Motion for Judgment on the Pleadings (the “Motion”) filed by Defendants Delta Air Lines, Inc. (“Delta”), US Airways, Inc. (“US Airways”), United Airlines, Inc. (“United”), American Airlines, Inc. (“American”), Southwest Airlines, Co. (“Southwest”), Spirit Airlines, Inc. (“Spirit”) and Frontier Airlines, Inc. (“Frontier”) (collectively “Defendants”) [Civil Action No. 2:13-cv-00662, Dkt. No. 61] (the “Motion”), and in support thereof states as follows:

Defendants’ Motion urges this Court to dismiss Plaintiff’s lawsuit under Rule 12(c) because U.S. Patent No. 8,313,023 (the “’023 Patent”) and U.S. Patent No. 8,511,550 (the “’550 Patent”) (collectively, the “Patents-in-Suit”) lack patentable subject matter.

I. RESPONSE TO DEFENDANTS’ STATEMENT OF THE ISSUE TO BE DECIDED BY THE COURT

Defendants misstate the issue to be decided by the Court as a determination of whether the entirety of the ‘023 and ‘550 Patents are invalid under 35 U.S.C. § 101 as ineligible subject matter.

Statutory subject matter is determined on a claim by claim basis. *See Bilski v. Kappos*, 130 S. Ct. 3218, 3231 (2010); *Ultramercial, Inc. v. Hulu, LLC*, 722 F.3d 1335, 1344 (Fed. Cir. 2013); MPEP § 2106. Accordingly, the issue to be decided by the Court is correctly stated as whether the challenged claims—namely, claims 31-34, 36-42, and 44-46 of the ‘023 Patent and claims 1-3 and 5-7 of the ‘550 patent—are directed to statutory subject matter under 35 U.S.C. § 101.

II. SUMMARY OF THE ARGUMENT

Defendants challenge certain claims of the '023 and '550 Patents, asserting that claims 31-34, 36-42, and 44-46 of the '023 Patent and claims 1-3 and 5-7 of the '550 Patent represent patent-ineligible subject matter under 35 U.S.C. § 101.

Claims 31-34 and 36-42 of the '023 Patent and claims 1-3 and 5-7 of the '550 Patent fall within the statutory classification of “processes,” and are not subject to the judicially-created exception for merely abstract ideas because they require specially-programmed computers effecting a concrete transaction. Claims 44-46 of the '023 Patent are computer products, fall within the statutory classification of “machines,” also fall outside the judicially-created exception for merely abstract ideas for the same reasons and additionally because computer program products of the type claimed have been affirmatively held statutory subject matter.

III. APPLICABLE AUTHORITY

The Supreme Court unanimously affirmed the Federal Circuit’s long-established precedent that patents granted by the USPTO are presumed valid, and that the accused infringer must prove patent invalidity by clear and convincing evidence. *See Microsoft Corp. v. i4i Limited Partnership*, 131 S. Ct. 2238, 2252 (2011).

Furthermore, for purposes of Defendants’ motion, “the Court must accept all factual allegations in the complaint as true and draw all reasonable inferences in favor of the non-movant.” *Clear with Computers*, 2014 WL923280, * 2 (citing *Erickson v. Pardus*, 551 U.S. 89, 93-94 (2007) (per curiam)). A motion brought pursuant to FED. R. CIV. P. 12(c) is designed to dispose of cases where the material facts are not in dispute and a judgment on the merits can be rendered by looking to the substance of the pleadings and any judicially noticed facts. *See Great Plains Trust Co. v. Morgan Stanley Dean Witter & Co.*, 313 F.3d 305, 312 (5th Cir. 2002).

The Supreme Court has also made clear that the test for patent eligibility under Section 101 is not amenable to bright-line categorical rules. *See Bilski*, 130 S. Ct. at 3229-30. Further, the Federal Circuit has recognized that it has been especially difficult to apply Section 101 properly in the context of computer-implemented inventions. *See CLS Bank Int'l v. Alice Corp. Pty. Ltd.*, 717 F.3d 1269, 1277 (Fed. Cir. 2013).

A 35 U.S.C. § 101 analysis begins with the statute. Section 101 provides that “[w]hoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.” 35 U.S.C. § 101. “In choosing such expansive terms . . . modified by the comprehensive ‘any,’ Congress plainly contemplated that the patent laws would be given wide scope.” *Bilski*, 130 S. Ct. at 3225 (quoting *Diamond v. Chakrabarty*, 447 U.S. 303, 308 (1980)).

Courts have fashioned three limited exceptions to the aforementioned §101 categories, prohibiting patents directed to laws of nature, physical phenomena and abstract ideas. *See Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 132 S. Ct. 1289, 1293 (2012).

Thus, even inventions that fit within one or more of the statutory categories are not patent eligible if drawn to a law of nature, a natural phenomenon, or an abstract idea. The underlying concern is that patents covering such elemental concepts would reach too far and claim too much, on balance obstructing rather than catalyzing innovation. But danger also lies in applying judicial exceptions too aggressively because “all inventions at some level embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas.” Taken too far, the exceptions could swallow patent law entirely.

CLS Bank, 717 F.3d at 1277 (citing *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 132 S. Ct. 1289, 1293 (2012)).

Accordingly, the basic steps in a patent-eligibility analysis is summarized by the Federal Circuit as follows:

We must first ask whether the claimed invention is a process, a machine, manufacture, or composite of matter. If not, the claim is ineligible under § 101. If the invention falls within one of the statutory categories, we must then determine whether any of the three judicial exceptions nonetheless bars such a claim – is the claim drawn to a patent ineligible law of nature, natural phenomenon, or abstract idea? If so, the claim is not patent eligible.

CLS Bank, 717 F.3d at 1277.

IV. ARGUMENT

Defendants assert that the challenged claims of the '023 and '550 Patents are unpatentable under 35 U.S.C. § 101. The first step in an analysis under 35 U.S.C. § 101 is to determine whether the claims at issue fall into one of the four patentable categories of a process, machine, manufacture, or composite of matter. Claims 1-3 and 5-7 fall within the “process” category. Claims 31-34 and 36-38 of the '023 Patent also fall within the “process” category. Claims 39-42 and 44-46 of the '023 Patent fall within the “machine” category. These classifications are not in dispute.

Once claims are determined to be within scope of the patentable categories, a determination is to be made whether one of the three judicially created exceptions to patentability apply. *See CLS Bank*, 717 F.3d at 1277. The three judicially created exceptions include claims representing laws of nature, physical phenomena, and abstract ideas. Defendants claim the latter is applicable to all claims.

Claims 31-34 and 36-42 of the '023 Patent and claims 1-3 and 5-7 of the '550 Patent (the “Programmed Hardware-Implemented Method Claims”) are directed to a method using specially programmed computers. Claims 44-46 of the '023 Patent (the “Computer Media Product Claims”) are directed to a computer program product having one or more non-transitory computer-readable mediums. The Programmed Hardware-Implemented Method Claims are treated as a first group for analysis below. The Computer Media Product Claims are addressed

separately, though many of the arguments with respect to why the Programmed Hardware-Implemented Method Claims are not directed to merely abstract subject matter are equally applicable to the Computer Media Product Claims.

A. The Programmed Hardware-Implemented Method Claims Are Directed to Patentable Subject Matter

Claims 31-34 and 36-38 of the '023 Patent and Claims 1-3 and 5-7 of the '550 Patent, the Programmed Hardware-Implemented Method Claims, are directed to a computer-implemented method using specially programmed computers, which is statutory subject matter. *See TQP Development, LLC v. Intuit Inc.*, 2014 WL 651935 (E.D. Tex. Feb. 19, 2014).

The Supreme Court has set forth three exceptions of subject matter ineligible for patent protection: “laws of nature, physical phenomena, and abstract ideas.” *Bilski v. Kappos*, 130 S. Ct. 3218, 3225 (2010). As explained by the Court, “[p]henomena of nature, though just discovered, mental processes, and abstract intellectual concepts are not patentable, as they are the basic tools of scientific and technological work.” *Gottschalk v. Benson*, 409 U.S. 63, 67 (1972). It is undisputed that the Programmed Hardware-Implemented Method Claims each recite a “method,” or process, that falls within the process category of statutory subject matter under Section 101. The question remaining is whether the claims are enveloped by a judicial exception; specifically, whether they recite simply an abstract idea.

To determine whether a claimed process and apparatus amount to no more than an abstract idea, the court performs a preemption analysis to determine whether the challenged claims pose “any risk of preempting an abstract idea.” *CLS Bank Int'l v. Alice Corp. Pty. Ltd.*, 717 F.3d 1269, 1282 (Fed. Cir. 2013) (plurality opinion). As a first step in the analysis, the court determines the idea represented in the claim. “[I]t is important at the outset to identify and define

whatever fundamental concept appears wrapped up in the claim so that the subsequent analytical steps can proceed on a consistent footing.” *Id.*

1. The Programmed Hardware-Implemented Method Claims Are Not Directed to the “Abstract Concept of Currency Conversion”

In the Motion, the Defendants assert that the ‘023 and the ‘550 Patents claims “cover nothing more than the abstract concept of currency conversion.” This assertion is the basis for challenging the claims under the abstract idea exception. No evidentiary support has been provided for the Defendants’ conclusion of fact, which Plaintiff contests. The claimed subject matter of the challenged claims of the ‘023 and ‘550 Patents are not for abstract ideas, but instead cover a specific network communication protocol involving several steps and a corresponding concrete transaction.

As a threshold issue, the abstract idea exception to 35 U.S.C. §101 only applies when claimed subject matter encompasses an abstract idea and does not apply when claimed subject matter encompasses a concrete transaction. “A preliminary question in applying the exceptions to such claims is whether the claim raises §101 abstractness concerns at all. Does the claim pose any risk of preempting an abstract idea? In most cases, the answer plainly will be no.” *CLS Bank*, 717 F.3d at 1282 (citing *Honewell Inc. V. Sperry Rand Corp.*, No. 4-67-cv-138, 1973 WL 903 (D. Minn. Oct. 19, 1973)).

Claims 32-34 and 36-38 of the ‘023 Patent all depend from independent claim 31. Claims 31-34 and 36-38 are thus directed to, *inter alia*:

at least one of one or more computers detecting a communication over a network
to grant a consumer a quantity of the entity independent funds...

responsive to the communication, at least one of one or more computers granting
the consumer the quantity of the entity independent funds, and

the at least one of the one or more computers accepting at least a portion of the quantity of entity independent funds in exchange for the goods or services that the commerce partner provides, wherein the one or more computers do not accept the non-negotiable credits of the entity's rewards program for the goods or services in absence of the conversion or transfer.

'023 Patent, claim 31.

Claims 1-3 and 5-7 of the '550 Patent are directed to:

a computer serving a set of one or more Web pages for a loyalty program of an entity to one or more remotely located client machines, wherein the Web pages are able to be rendered within a client-side browser as a graphical user interface on the one or more client machines, wherein upon being rendered within the client-side browser said graphical user interface shows a quantity of non-negotiable credits, wherein said non-negotiable credits are loyalty points of the loyalty program possessed by a member, wherein upon being rendered within the client-side browser the graphical user interface comprises a conversion option to convert at least a subset of the shown non-negotiable credits into a quantity entity independent funds...

wherein an agreement exists between the entity and the commerce partner, wherein the agreement permits members to convert the non-negotiable credits to the entity independent funds in accordance with a fixed credits-to-funds conversion ratio, wherein the agreement specifies that the entity is to compensate the commerce partner in an agreed upon amount of cash or credit for conversions of non-negotiable credits to entity independent funds,

the computer responsive to receiving a message indicating a selection of the conversion option, processing the selection to effectuate changes in the served set of Web pages; and

responsive to the processing, the computer serving one or more Web pages or Web page updates that include the effectuated changes to the one or more remotely located client machines, wherein upon being rendered within the client-side browser the graphical user interface is updated with the effectuated changes, wherein the updated graphical user interface shows a reduced quantity of non-negotiable credits possessed by the member in the loyalty program, said reduced quantity resulting at least in part from the subset of non-negotiable credits being converted into the quantity of entity independent funds in accordance with the fixed credits-to-funds conversion ratio.

'550 Patent, claim 1.

The subject matters of both claim 31 of the ‘023 Patent and claim 1 of the ‘550 Patent are not merely abstract because the claims recite substantive limitations in the recited steps that sufficiently narrow the claims so they do not cover the full abstract idea. *See Accenture Global Servs., GmbH v. Guidewire Software, Inc.*, 728 F.3d 1336, 1344-45 (Fed. Cir. 2013) (preemption analysis includes whether “additional substantive limitations . . . narrow, confine, or otherwise tie down the claim so that, in practical terms, it does not cover the full abstract idea itself.”). The inquiry is focused on “whether a claim, as a whole, includes meaningful limitations restricting it to an application, rather than merely an abstract idea.” *Ultramercial, Inc. v. Hulu, LLC*, 722 F.3d 1335, 1344 (Fed. Cir. 2013).

The Defendants assert that the above claims cover “the abstract concept of currency conversion.” Motion at 12. This is incorrect; the subject claims are directed to a concrete transaction implemented by specially-programmed hardware. In the context of claim 31 of the ‘023 Patent, these include at least one computer that detects a communication over a network to grant a consumer a quantity of entity-independent funds; responsive to the communication, actually granting the quantity of entity-independent funds to the consumer; and accepting at least a portion of the entity-independent funds in exchange for goods or services of the commerce partner subsequent to a conversion between the non-negotiable credits to entity-independent funds. In the context of claim 1 of the ‘550 Patent and its dependent claims, there is furthermore a computer serving Web pages including in connection with a loyalty program, the Web pages adapted to be rendered by a client-side browser, a GUI showing a quantity of non-negotiable credits and also presenting a conversion option. Additional substantive limitations include a programmed computer responsive to a message indicating selection of the conversion option and

effectuating corresponding Web pages. Changes are reflected based on the conversion from non-negotiable credits to entity-independent funds.

Defendants' contention that the claims are directed to the abstract concept of currency conversion is all the more strained because the term "currency" is not present in any of the claims. Even accepting as true Defendants' characterization, however, the Defendants would then have to prove that the above claimed limitations "preempted" currency conversion and did not add any significant meaningful limitations to this purported abstract idea. *See Accenture Global Servs.*, 728 F.3d at 1344-45 (Fed. Cir. 2013); *accord TQP Development*, 2014 WL 651935 at *3-4. The Defendants cannot carry that burden, because the abstract concept of currency conversion is plainly not preempted by the relatively narrow and specific claims at issue.

Further, if the claimed invention embodies an abstract idea, that idea is mischaracterized by the Defendants, as it omits essential steps, thereby failing to read the claim as a whole. The above claims are not directed to "any currency conversion," but instead impose meaningful and practical limitations and as such do not "preempt the concept of currency conversion." The only conversions that apply within the claimed limitations are conversions of non-negotiable credits that have been earned as part of a rewards program of an entity. The non-negotiable credits have redemption restrictions such that "the commerce partner does not accept the non-negotiable credits for the goods and services that the commerce partner provides." The non-negotiable credits are credits that are converted or transformed into "entity independent funds of a loyalty program of a commerce partner." The reward points are converted in accordance with a "credits-to-funds ratio," which the commerce partner agrees to when agreeing to accept transfers or conversions of non-negotiable credits to entity independent funds.

Moreover, the conversion per claim 31 of '023 Patent is further restricted to being performed by a specific computer architecture. The specific computer, per the claims and by antecedent basis, grants the consumer the quantity of entity independent funds. This same computer "the at least one of the one or more computers" accepts at least a portion of the granted quantity of entity independent funds in exchange for the goods or services that the commerce partner provides.

The entity independent funds are loyalty points of a loyalty program of the commerce partner. Per claim 31's limitations, the same computer, which runs the commerce partner's loyalty program or is otherwise permitted to grant loyalty points) redeems the loyalty points of the loyalty program of the commerce partner for commerce partner goods and services. Thus, a "generic" computer is not claimed; instead, a special purpose computer able to grant loyalty points to members of the loyalty program of the commerce partner and able to redeem customer possessed loyalty points for goods or services that the commerce partner provides. *See, e.g., Ultramercial, Inc. v. Hulu, LLC*, 722 F.3d 1335, 1352-53 (Fed. Cir. 2013).

To illustrate the claim 31 of the '023 Patent by example, an airline agrees to accept converted points from members of a hotel's loyalty program at an agreed upon conversion ratio of points-to-miles. A computer (able to grant miles of the airline's loyalty program to a member of the airline's loyalty program) receives a communication to grant a quantity of miles for converted points. Points are expended during this conversion, and the airline is compensated for providing the miles. The computer (that granted the miles) accepts a portion of the miles (resulting from the conversion of points) for goods or services that the airline provides. Without the conversion, the computer does not accept points for goods or services that the airline

provides. The above example clearly includes multiple and practical limitations that prevent claim 31 of the '023 Patent from pre-empting the entire abstract idea of "currency exchange."

Significantly, in addition to the term "currency" not being present in the claims, loyalty points are dissimilar to currency as the term is generally used by those of skill in the art. Unlike currency, the non-negotiable credits of the challenged claims are not "fungible" mediums of exchange. To receive loyalty points, membership with a loyalty program is implicit. No membership requirements exist for possessing currency, as the term is commonly understood. Loyalty points earned by a member can be canceled should terms of the loyalty program not be satisfied by a member. Once issued, currency can generally not be canceled in the same fashion. Terms of a loyalty program can be changed unilaterally by the program holder, to affect a quantity and value of loyalty points possessed by members. No such terms apply to currency as commonly understood. Loyalty points are restricted to be used by a point owner. No such restrictions apply to currency as commonly understood. Thus, loyalty points are dissimilar to currency as the term is generally used by those of skill in the art.

Moreover, unlike currency, loyalty programs encourage consumer lock-in. In an airline loyalty program, a consumer is provided a quantity of miles for using an airline service, where the miles are able to be applied towards future flights/services with that airline. In this way, customer loyalty with a single airline is encouraged. As a general principle, entities providing loyalty programs do not want earned loyalty points to be fungible, as it defeats the loyalty incentives inherent in loyalty programs. Thus, characterizations of the '023 and '550 Patents as a "currency exchange" are factually incorrect and misleading in context of the claims being challenged.

The claims are key to this patent eligibility inquiry. A court must consider the asserted claims *as a whole* when assessing eligibility:

In determining the eligibility of respondents' claimed process for patent protection under § 101, their claims must be considered *as a whole*. It is inappropriate to dissect the claims into old and new elements and then to ignore the presence of the old elements in the analysis. This is particularly true in a process claim because a new combination of steps in a process may be patentable even though all the constituents of the combination were well known and in common use before the combination was made.

Diehr, 450 U.S. at 188 (emphasis added). And, a court must consider the *actual* language of the claim. The majority in *Diehr* rejected the minority's approach ignoring portions of the claims: "[i]n order for the dissent to reach its conclusion it is necessary for it to read out of respondents' patent application all the steps in the claimed process which it determined were not novel or 'inventive.' That is not the purpose of the § 101 inquiry ..." *Id.* at 193, n. 15 (citations omitted); accord *CLS Bank*, 717 F.3d at 1280-81.

Reading the claims as a whole, each challenged claim additionally includes a limitation of an agreement by the commerce partner to accept conversions of non-negotiable credits for entity independent funds, where the non-negotiable credits and the entity independent funds are loyalty points of different loyalty programs provided by the entity and the commerce partner, respectively. Additionally, each challenged claim requires compensation be paid to the commerce partner for these conversions.

To illustrate by example, assume the entity is a hotel providing points to customers as part of a rewards program. In that scenario, the commerce partner is an airline offering miles to customers as part of a loyalty program. The points are non-negotiable credits within the context of the claims, and the miles are the entity independent funds. The airline doesn't accept points for airline goods or service, but does accept miles. For consumers who are members of the rewards program and the loyalty program, the subject airline agrees to give members a quantity

of miles in exchange for a decrease in the members' points earned in the rewards program. The airline incurs a cost to give the members miles during this exchange since the miles can be used for the airline's services/goods. The hotel decreases its concomitant liability since points are expended. Per the agreement, the airline is compensated (by the hotel) for providing the member the miles during the conversion. The above example generally illustrates a process per the challenged claims, specifically claim 31 of the '023 Patent and its dependent claims. Further, the example illustrates a controlled computer-implemented series of transactions involving a non-negotiable medium of exchange.¹

In a recent case, the PTAB was faced with an argument similar to that now raised by Defendants: namely, that although the claim explicitly required action by computer architecture, and was hence not merely abstract *per se*, the claimed computing equipment was not novel. The PTAB rejected the argument because the claim is drawn to the novel combination of elements, not the individual constituent components. *See Apple Inc. v. Sightsound Tech., LLC*, CBM2013-00019, slip opinion (P.T.A.B. 2013) (attached as **Exhibit 1**).

Petitioner further argues that the specific computer components recited in claim 1 add nothing to the claims because each was known individually in the prior art and can be found in a general purpose computer. *Id.* at 37, 42-45; *see* Ex. 1051 ¶¶ 58-78. Petitioner's analysis, however, does not account sufficiently for the claim as a whole (i.e., the particular combination of components and how the claim requires that they be used).

Apple at 19.

¹ Economists sometimes refer to different services and goods within a marketplace as being complementary or substitutes for each other. For example, people that fly on airlines often stay at hotels and rent cars. Thus, expenditures with the hotel may increase expenditures with the airline and expenditures with the airline may increase expenditures with the hotel. Conversely, in an undifferentiated currency exchange, each unit of currency has a baseline value, irrespective of complements or substitutes. A five dollar bill is worth five dollars, whether it is used to purchase a hotel room, an airline flight, or a sandwich. If loyalty points were completely fungible (like the US dollar or currency) these points would provide no market advantage or lock-in – and companies would not incur significant expense of running these loyalty programs.

The PTAB considered the Supreme Court's holding in *Diehr* particularly instructive on this point:

In determining the eligibility of [a] claimed process for patent protection under § 101, . . . claims must be considered as a whole. It is inappropriate to dissect the claims into old and new elements and then to ignore the presence of the old elements in the analysis. This is particularly true in a process claim because a new combination of steps in a process may be patentable even though all the constituents of the combination were well known and in common use before the combination was made. 450 U.S. at 188; *see also Bilski*, 130 S. Ct. at 3230.

Apple at 19-20.

The Board thus held that the combination of components was directed to statutory subject matter.

Thus, while components like computer memory and telecommunications lines were known at the time of the invention, it is those components in combination (with the specific functions performed using the components) that must be analyzed. Assessing claim 1 in that light, we are not convinced that the claim represents only the abstract idea of selling music.

Apple at 20. Similarly here, the combination of steps and architectural components, viewed as a whole, is novel and not merely abstract.

2. Claims 1-3 and 5-7 of the '550 Patent Require Contractual Agreements between Parties

Claims 1-3 and 5-7 of the '550 Patent further specify that a contractual agreement exists directly between the commerce partner and the entity. This permits an exchange of loyalty points (which are typically not fungible) to be restricted to a defined set of partners in commerce. The hotel can choose to permit points to be converted to miles of the airline, while denying exchange of points to be used for services provided by a competitor. Moreover, the claims in the '550 and '023 Patents when read as a whole allow for a level of transferability among different loyalty programs in a controlled manner, which is set forth in claims, which require an

agreement of the commerce partner to exchange entity independent credits for non-negotiable funds in accordance with a points-to-funds ratio for compensation.

Further in view of the above, Defendants' assertion that the claimed limitations cover "nothing more than the abstract concept of currency conversion" is incorrect. The claims of the '023 and '550 patents are not directed to currency conversion, which is the only asserted basis in the motion for challenging the eligibility of claims of the '023 and '550 patents. Defendants have thus omitted necessary steps of analysis, have made incorrect assumptions of fact, and have failed to read the claim as a whole. Construing the contested facts in the light most favor to Plaintiff, the Defendants have failed to state a proper legal basis for challenging patent eligibility of the claims of the '023 and '550. The Motion fails for this reason, and should be dismissed.

3. The Programmed Hardware-Implemented Method Claims are Directed to a Concrete Transaction, Not an Abstract Idea

No claim construction has been issued by the Court. Defendants' Motion appears to be predicated on an improper claim construction that the claimed subject matter is a "currency exchange," which as mentioned above is incorrect as a matter of law (claim construction is a question of fact, which should be determined in Plaintiff's favor for purpose of this Motion).² "Where bona fide §101 concerns arise, however, it is important at the outset to identify and define whatever fundamental concept appears wrapped up in the claim so that the subsequent

² The challenged claims cover converting non-negotiable credits earned with a reward program to entity independent funds, which are loyalty points of a commerce partner in accordance with an agreement of the commerce partner, where the commerce partner is reimbursed for the conversion. The conversion occurs in accordance with a credits-to-funds ratio. The entity independent funds have redemption restrictions, such that the commerce partner does not accept the non-negotiable credits for goods or services that the commerce partner provides. The commerce partner does accept the entity independent funds for the goods and services that the commerce partner provides. Whether or not this claimed concept is an abstract idea is a question of fact that has not been determined. For purposes of Defendants' motion, questions of fact must be determined in a light most favorable to the Plaintiff.

analysis steps can proceed on a consistent footing. ... In short, one cannot meaningfully evaluate whether a claim preempts an abstract idea until the idea supposedly at risk of preemption has been unambiguously identified. Although not required, conducting a claim construction analysis before addressing §101 may be especially helpful in this regard by facilitating a full understanding of what each claim entails.” *See CLS Bank*, 717 F.3d at 1282 (*citing Bancorp Servs. v. Sun Life Assurance Co. of Can.*, 687 F.3d 1266, 1273-74 (Fed. Cir. 2012)).

As previously discussed, the challenged claims cover converting non-negotiable credits earned with a reward program to entity independent funds, which are loyalty points of a commerce partner in accordance with an agreement of the commerce partner, where the commerce partner is reimbursed for the conversion. The conversion occurs in accordance with a credits-to-funds ratio. The entity independent funds have redemption restrictions, such that the commerce partner does not accept the non-negotiable credits for goods or services that the commerce partner provides. The commerce partner does accept the entity independent funds for the goods and services that the commerce partner provides.

An economic action resulting in a tax consequence (a taxable economic transaction) is not abstract, but is instead concrete. There is a real-world consequence of the economic action that requires, by law, taxes for the economic action to be paid to a state or federal government tax agency. These tax agencies are not authorized under the constitution to collect taxes arbitrarily, but require a tax basis defined by law. No known existing laws enact a tax for having an “abstract idea.”

Generally accepted accounting principles (GAAP) refer to a standard framework of guidelines for accounting used in any jurisdiction. GAAP require concrete economic transactions to be accounted for. *See Exhibits 2-4*. GAAP includes no provisions for accounting for abstract

ideas. That is, GAAP does not require an accounting when an entity mentally contemplates conducting a financial transaction. Accountings under GAAP are only required for actual financial transactions.

No known decisions under the judicially created exception for abstract ideas encompass subject matter that if followed necessarily results in a tax consequence or that necessarily results in a GAAP recognized financial accounting event. For example, in *Bilski*, the Court found the patent covered “the abstract idea of hedging against risk.” *See Bilski*, 130 S. Ct. at 3222. In *CLS Bank*, the court found the claimed subject matter to encompass “an abstract idea of employing an intermediary to facilitate simultaneous exchanged of objections in order to minimize risk.” *See CLS Bank*, 717 F.3d at 1275. Both cases dealt with internal record keeping processes related to financial systems. Neither performed actions where an economic transaction occurred, which by necessity resulted in a tax consequence or a GAAP accounting event.

The claims of the ‘023 and ‘550 Patents require a financial transaction to occur between two different business structures. This financial transaction involves changes in quantities of two different loyalty programs and resulting in the commerce partner receiving compensation. From a bookkeeping, financial accounting, and tax accounting perspective, the claimed process of claims 1-3, 5-7 of the ‘550 Patent and claims 31-34 and 36-38 of the ‘023 Patent are for a concrete transaction. Claims 39-42 and 44-46 of the ‘023 Patent are directed to a machine that performs this concrete transaction.

To elaborate, an accrued value of earned loyalty points meets the financial accounting definition of a liability. Under GAAP, a liability is an obligation from past transactions or events, the settlement of which requires future economic sacrifice. When a liability is reduced (or increased), an accounting transaction is required by GAAP. Thus, a change (reduction) in a

quantity of non-negotiable credits resulting from converting the non-negotiable credits in to entity-independent points of the loyalty program of the commerce partner results in a change of liability. Using the previous example, when the hotel reduces points of Rewards Program a GAAP recognized financial transaction occurs. Similarly, when the airline provides miles to a member and receives compensation, a GAAP recognized financial transaction occurs.

U.S. publicly-traded companies actively record liabilities in accordance with GAAP. For example, page 53 of Republic Airways Holdings Inc.'s (a/k/a "Frontier Airlines") 2012 10K SEC Filing, attached as **Exhibit 5**, notes that an awards program change, effective Dec. 31, 2012, caused expiration of mileage from non-active accounts after 18 months rather than the previous 24 month rule. Based only on this change, Republic/Frontier decreased its frequent flyer liability by \$10 million. This reduction of liability of \$10 million is reported to the IRS, and is subject to SEC filings. *See id.* at 52-53.

Public companies with substantial loyalty programs must record future loyalty program obligations and, in spite of disagreement regarding the exact recording method³, the general character is that accrued loyalty points are liabilities to the company offering the loyalty program. When loyalty program obligations are transferred from one company (*e.g.*, Hilton) to another company (*e.g.*, Frontier), a bookkeeping entry is required. In addition, the fee paid by the transferor to the transferee (where the fee is compensation for taking on an economic liability) would have taxation effects. Specifically, the paid fee should be a deductible business expense per Section 162(a) of the Internal Revenue Code. The economic substance of loyalty

³ Compare FASB's Emerging Issues Task Force (EITF) Issue No. 00-22, "Accounting for 'Points' and Certain Other Time-Based or Volume-Based Sales Incentive Offers, and Offers for Free Products or Services to Be Delivered in the Future" and Issue No. 01-9, "Accounting for Consideration Given by a Vendor to a Customer (Including a Reseller of the Vendor's Products)." These documents are attached as Exhibits 2 and 3.

point transfer is captured through bookkeeping and financial accounting records and payment to extinguish a loyalty point liability has federal tax implications. These are not vague and abstract ideas, but are instead concrete transactions, for which significant legal guidelines and requirements exist.

B. The Computer Medium Claims Are Directed to Patentable Subject Matter

In addition to the bases identified above,⁴ claims 39-42 and 44-46 of the '023 Patent are patentable for the additional reason that claims of this type have been explicitly identified as patentable. These claims are directed to a computer program product having one or more non-transitory computer-readable mediums. Computer program products having non-transitory computer readable mediums are statutory subject matter.

[T]he Board rejected Beauregard's computer program product claims on the basis of the printed matter doctrine. Beauregard appealed. The Commissioner now states "that computer programs embodied in a tangible medium, such as floppy diskettes, are patentable subject matter under 35 U.S.C. § 101 and must be examined under 35 U.S.C. §§ 102 and 103." The Commissioner states that he agrees with Beauregard's position on appeal that the printed matter doctrine is not applicable.

⁴ As with the Programmed Hardware-Implemented Method Claims, these claims are not directed to "any currency conversion." Indeed, there is no currency conversion claimed, but rather a conversion of mediums of exchange with a redemption restriction. Moreover, the claims impose meaningful technical limitations. The only conversions that apply to the claimed limitations are conversions of non-negotiable credits that have been earned as part of a rewards program of an entity. The non-negotiable credits have redemption restrictions such that the commerce partner does not accept the non-negotiable credits for the goods and services that the commerce partner provides. The non-negotiable credits are credits that are converted or transformed into entity independent funds of a loyalty program of a commerce partner. The points are converted in accordance with a credits-to-funds ratio, which the commerce partner agrees to when agreeing to accept transfers or conversions of non-negotiable credits to entity independent funds. As noted above, these claimed limitations impose a significant practical limitation on claim 39 and do not preempt the entire abstract idea of "currency conversion," as Defendants contend.

Ex Parte Steve Grove and Larry Cornett, 2014 WL 553847 (PTAB January 28, 2014) (citing *In re Beauregard*, 53 F.3d 1583, 1584 (Fed. Cir. 1995)).

As set forth in the USPTO policy guidance, a claim drawn to a computer-readable medium that covers both transitory (signal) and non-transitory embodiments may be amended to narrow the claim to cover only statutory embodiments to avoid a rejection under 35 U.S.C. § 101 by adding the limitation “non-transitory” to the claim. *Id.*; see also MPEP § 2106 (I) (8th ed., Rev. 9 Aug. 2012). These claims include the suggested language.

While the machine or transformation test is not the exclusive approach to assessing patentable subject matter, it is an accepted approach. See *Bilski v. Kappos*, 130 S. Ct. 3218, 3231 (2010). A notice by the Commissioner of the USPTO dated January 26, 2010, attached hereto as **Exhibit 6**, provides guidance for patent applicants who adopt claims directed to computer readable media. In an effort to assist the patent community in overcoming a rejection or potential rejection under 35 U.S.C. § 101 in this situation, the USPTO suggests adding the limitation “non-transitory” to the claim, which it concludes in the majority of cases will render claimed limitations patent eligible.

This suggestion by the Commissioner of the USPTO was based on the USPTO guidelines (MPEP 2106.01) consistent with case law that “when functional descriptive material is recorded on some computer-readable medium, it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized.” Compare *In re Lowry*, 32 F.3d 1579, 1583-84 (Fed. Cir. 1994) (discussing patentable weight of data structure limitations in the context of a statutory claim to a data structure stored on a computer readable medium that increases computer efficiency) and *In re Warmerdam*, 33 F.3d 1354, 1360-61 (Fed. Cir. 1994) (claim to computer

having a specific data structure stored in memory held statutory product-by-process claim) with *Warmerdam*, 33 F.3d at 1361 (claim to a data structure *per se* held nonstatutory).

Claim 39 of the '023 Patent is by definition a machine; it consists of one or more non-transitory computer-readable mediums, and program instructions stored within these mediums. The program instructions are functional descriptive material, which is not challenged. For reasons consistent with those stated for claim 31 of the '023 Patent, the factors of the transformation test are also satisfied by claim 39 of the '023 Patent.

V. CONCLUSION

For the reasons set forth above, Plaintiff respectfully requests that Defendants' Motion be denied, and the Court rule that the Patents-in-Suit are directed to patentable subject matter under 35 U.S.C. § 101.

Dated: April 28, 2014

Respectfully submitted,

/s/ Andrew G. DiNovo
Andrew G. DiNovo
Texas State Bar No. 00790594
Adam G. Price
Texas State Bar No. 24027750
Stefanie T. Scott
Texas State Bar No. 24061617
DiNovo Price Ellwanger & Hardy LLP
7000 N. MoPac Expressway, Suite 350
Austin, Texas 78731
Telephone: (512) 539-2626
Telecopier: (512) 539-2627

CERTIFICATE OF SERVICE

The undersigned hereby certifies that all counsel of record who are deemed to have consented to electronic service are being served this 28th day of April, 2014, with a copy of the foregoing document via the Court's CM/ECF system pursuant to Local Rule CV-5(a)(3).

/s/ Andrew G. DiNovo
Andrew G. DiNovo